



## **Redacted - For Public Inspection**

June 21, 2018

Via Email

Ms. Elizabeth Drogula
Deputy Division Chief
Telecommunications Access Policy Division
Wireline Competition Bureau
Federal Communications Commission
445 12<sup>th</sup> Street, SW
Washington, DC 20554

Re: GCI Rural Health Care Support for Funding Year 2017

Dear Liz:

Per your request, attached please find the written explanation of the development of the bandwidth allocator. We ask that the attachment to this letter this be subject to a request for confidential treatment for the reasons specified in our letter of June 15, 2018. This attachment contains non-public information about GCI's oversubscription rates.

Sincerely,

John T. Nakahata Julie A. Veach

Jennifer P. Bagg

Counsel to GCI Communication Corp.

Enclosure

cc: Trent Harkrader

Ryan Adams Preston Wise Arielle Roth

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## **TERRA Bandwidth Allocation Methodology**

June 21, 2018

Due to varying classes of service quality and priority, it is not accurate simply to treat all Mbs of bandwidth as equivalent. Accordingly, GCI normalized to a Mb of Priority bandwidth. To do that, for each year 2014 to 2017, the following process was used to allocate bandwidth among the various TERRA service categories –

Step 1 – Using available network provisioning data, all TERRA services (excluding administrative uses and network monitoring and control, which are not revenue generating) were divided into the following seven service categories –

- 1. Rural Health Care
- 2. E-Rate
- 3. GCI Business (commercial customers not Rural Health Care, not E-Rate)
- 4. GCI Core Non-Cellular (includes Rural Broadband, cable modem and fixed wireless)
- 5. GCI Core Wireless (including 2G and 3G data)
- 6. GCI Voice Wireline (GCI MTS voice trunking including SS7 links)
- 7. GCI Voice Wireless (including 2G and 3G voice services)

Step 2 – Using network provisioning data, network traffic in each of the seven service categories was then separated into one of two service classes – Priority Class (not eligible for oversubscription or packet loss) and Normal Class (eligible for oversubscription).

Step 3 – Oversubscription factors were calculated for Normal Class traffic by dividing end user generated traffic volume (as recorded by GCI's network monitoring systems) by end user provisioned port capacity.

- E-Rate and GCI-Business over subscription levels were determined to be in 2014, 2015 and 2016 increasing to in 2017.
- GCI Core over subscription levels were determined to be in 2014 and 2015 growing to in 2016 and 2017. (for wireless data, provisioned capacity equals TERRA market wireless subscribers multiplied by the committed SLA throughput for each subscriber)

Step 4 – For each of the seven service categories-

- The aggregate TERRA Normal Class provisioned port capacity was multiplied by the oversubscription factor to determine Adjusted TERRA Utilization.
- The aggregate TERRA Priority Class provisioned port capacity was added at 100% of the provisioned port capacity.
- Total Adjusted TERRA Utilization was calculated for each of the seven service categories by adding the Adjusted TERRA Normal Class and the Priority Class traffic (unadjusted).

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TERRA Bandwidth Allocator

Step 5 – For each year, Total Adjusted TERRA Utilization For All Service Classes was calculated by adding together the Total Adjusted TERRA Utilization for each of the seven categories. Subsequently, percentage allocations were calculated by dividing Total Adjusted TERRA Utilization for each individual category by the Total Adjusted TERRA Utilization For All Service Categories.